Communities for a Better Environment
California Coalition Against Toxics
ProUno

March 5, 2007

Via E-Mail and U.S. Mail

Watson Gin, Deputy Director
Hazardous Waste Management Program
Department of Toxic Substances Control
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Re: Petition for Review of Hazardous Waste Facility Permit for Industrial Services Oil Company, Inc., 1700 South Soto Street, Los Angeles, California 90023

Dear Mr. Gin:

Communities for a Better Environment ("CBE"), ProUno, and California Coalition Against Toxics ("CCAT") (collectively, "CBE") submit this petition for review of the Final Hazardous Waste Facility Permit ("Permit") Decision for Industrial Services Oil Company, Inc. ("ISOCI") issued by the Department of Toxic Substances Control ("DTSC") on December 18, 2006.

CBE challenges this Permit because it fails to protect the East Los Angeles community surrounding the ISOCI facility from greatly increased cancer risk and other significant risks to human health that will be imposed by the facility's proposed acceptance of hundreds of additional ignitable, carcinogenic, and extremely toxic wastes. The Permit would allow ISOCI to radically expand its operations and store an unprecedented 250,000 gallons of hazardous waste in unsafe rail cars without adequately evaluating the risks and impacts associated with a catastrophic release of hazardous waste during an earthquake or accident. This case presents a classic example of environmental injustice because the neighborhoods that are already disproportionately impacted by environmental harms will bear the burden and risks from the facility's proposed operations expansion and modification described in the Final Environmental Impact Report ("Final EIR") and the Permit ("the Project").

CBE is a membership organization with approximately 20,000 members throughout the state of California, including thousands living, working, breathing, owning property and recreating in the South Coast Air Basin. Many members reside in the Southeast Los Angeles area. CBE's organizational goals include protecting and enhancing the environment and public health by reducing air, water and land pollution and minimizing hazards in California's urban areas, including the South Coast Air Basin by, among other things, facilitating public participation in

administrative decision-making processes, and by ensuring implementation of laws that protect public participation, public health and the environment, like CEQA.

ProUno is a membership organization whose members live primarily in Maywood, California and within two miles of ISOCI. ProUno's members live, recreate, travel to work, and attend school within two miles of ISOCI. ProUno's goals include creating a better future for our children, advocating for immigrants' rights and environmental justice, and working to reduce the hazards from air pollution, contaminated sites, and contaminated water. CBE is a membership organization with approximately 20,000 members throughout the state of California, including thousands living, working, breathing, owning property and recreating in the South Coast Air Basin. Many members reside in the Southeast Los Angeles area. CBE's organizational goals include protecting and enhancing the environment and public health by reducing air, water and land pollution and minimizing hazards in California's urban areas, including the South Coast Air Basin by, among other things, facilitating public participation in administrative decision-making processes, and by ensuring implementation of laws that protect public participation, public health and the environment, like CEQA.

CCAT was founded in 1989 at the Santa Isabel Church after a march on a proposed hazardous waste incinerator in Vernon. Over 25 environmental justice groups from across California came together to form a statewide coalition that would help the environmental justice community in California network, learn from each other's struggles, and advocate for policy change in state and federal government. CCAT, with over 70 members now, is active in a number of efforts to advance community-based environmental health protections across the state, including in Southeast Los Angeles near the ISOCI facility. CCAT's mission is pollution prevention, environmental justice, and world peace.

CBE submitted comments regarding the Draft Permit and Draft Environmental Impact Report ("DEIR") on February 13, 2006 and April 14, 2006 that raised a number of serious issues, including issues concerning DTSC's public participation process, ISOCI's proposed operations, and the impact of ISOCI's proposed operations on human health and the environment. CCAT submitted comments regarding the Draft Permit and DEIR on April 14, 2006. It is clear from DTSC's Response to Comments and the Permit that DTSC has addressed very few of the issues raised by CBE. This lack of response insults area residents who will be impacted by the proposed expansion of the facility, many of whom have voiced their opposition to the Project.

We submit this petition for review ("Petition") pursuant to 22 CCR § 66271.18(a). The Petition addresses a number of specific issues, all of which are integral to the entire Permit. Many of the issues involve clearly erroneous findings of fact and conclusions of law or raise important policy considerations.

Relationship to EIR

Some of the grounds for appeal set forth herein relate to both the Permit and the Final EIR. However, this Petition may not present all deficiencies from the Final EIR. ProUno, CBE and/or

CCAT may present further information to DTSC regarding deficiencies in the Final EIR prior to issuance of a Notice of Determination. ProUno, CBE and CCAT request that this Petition be included in the administrative record for this matter.

EXECUTIVE SUMMARY

This Petition specifically describes flaws in DTSC's public participation process, numerous deficiencies in the terms and conditions of the Permit, and defects in the health risk assessment and environmental impact analysis.

Public Participation

- DTSC has seriously mishandled the public participation process for this permit action. DTSC has issued a permit without requiring compliance with the Tanner Act's community involvement process, thereby artificially divorcing decisions about hazardous waste issues from decisions about land use issues and subverting the intent of the Tanner Act. DTSC should not process a hazardous waste permit application until after the Tanner Act process has been completed. DTSC also failed to conduct meaningful outreach to the Spanish-speaking communities adjacent to the facility, translate key documents into Spanish, provide accurate fact sheets, and make the complete record available in a timely manner. To cure these defects, the appropriate lead agency – the City of Los Angeles – must restart the environmental review process in coordination with the Tanner Act process. Granting this Petition will allow DTSC to address (a) the policy considerations of processing the Permit prior to the initiation of any Tanner Act proceedings, (b) the problem of processing the Permit without any assurance that ISOCI will apply for the CUP, and (c) the issue of acting as the lead agency under CEQA when it is more appropriate for the City to make decisions about local land use decisions.

Permit Deficiencies

- The Permit fails to guard against risks associated with the storage of hazardous waste in rail cars. ISOCI's proposed secondary containment system for ten rail cars that will hold up to 250,000 gallons of hazardous waste is wholly inadequate and not protective of the surrounding communities. The spill pan containment system approved by DTSC does not have sufficient capacity to contain a catastrophic release from the rail cars, which could occur from an earthquake, derailment, terrorist action, or chemical reaction. A rapid release from just one fully-loaded rail car would quickly overwhelm the containment system's 6-inch deep spill pans and pump capacity. Moreover, DTSC incorrectly assumes that the system's two pumps will not malfunction or lose power and that its 4-inch drain pipes will not clog. DTSC must revise the Permit to require a passive secondary containment system with an impermeable basin and walls capable of containing the total volume of rail cars. Granting this Petition will allow DTSC to address the policy considerations of authorizing a secondary containment system for an unprecedented amount of hazardous waste storage in rail cars.

- The Permit fails to guard against the risks posed by ISOCI's radically expanded operations and acceptance of hundreds of additional waste codes, including ignitable, carcinogenic, and extremely toxic wastes. An explosion or other reaction at the facility easily could involve ignitable waste and petroleum products and result in an uncontrollable fire that exposes children and other sensitive receptors in the surrounding community to toxic air contaminants for an extended period of time. The deficiencies in the Permit are especially problematic given ISOCI's long record of noncompliance with hazardous waste laws and regulations, the absence of conditions that will ensure incompatible wastes are tracked and segregated, and the failure of the Waste Analysis Plan to require that waste analysis tasks be performed by properly trained and qualified personnel. The Permit conditions must be strengthened to address these and other defects discussed below. DTSC should require ISOCI to demonstrate that it can safely handle a limited number of additional waste codes before allowing any further expansion of the facility. Granting this Petition will allow DTSC to address clearly erroneous findings of fact and conclusions of law concerning the adequacy of the Permit conditions for protection of human health and the environment.

EIR & HRA Deficiencies

- DTSC's analysis of potential environmental impacts associated with the facility's proposed operations is woefully inadequate and fails to accurately assess the risks to human health and the environment. The Final EIR fails to evaluate a number of potentially significant impacts, including the impact from a catastrophic release of hazardous waste from rail cars at or near the facility, the impact from a multiple vessel upset and release scenario, impacts on land use from conflicts with redevelopment and community plans, and the impact of greenhouse gas emissions associated with the Project. In addition, the Final EIR does not address environmental justice concerns about disproportionate impacts on an environmentally impacted neighborhood, is based on an inaccurate description of baseline conditions, and fails to evaluate a reasonable range of alternatives to the Project. Granting this Petition will allow DTSC to address clearly erroneous conclusions of law and omissions in the Final EIR.

- The Health Risk Assessment ("HRA") likely underestimates the cancer risk from the facility's proposed expanded and modified operations by more than 2000%, and it arbitrarily uses an incremental cancer risk management threshold that is less protective than the customary approach The actual cancer risk associated with the Project greatly exceeds both the standard one per million regulatory threshold used by DTSC, OEHHA, and U.S. EPA., as well as the 10 per million threshold inappropriately used in the HRA. The HRA also fails to adequately evaluate risks from a number of foreseeable failure and upset scenarios, evaluate risks from routine and accidental releases of new waste streams, or compare risks of the proposed operations to risks of current activities, and excludes all risks from mobile sources even though rail and truck traffic to the facility will more than double. A revised DEIR that addresses all potential environmental impacts and imposes

adequate mitigation measures must be circulated, and the HRA must be revised to accurately evaluate risks to human health. Granting this Petition will allow DTSC to address clearly erroneous findings of fact, conclusions of law, and omissions in the Final EIR and analysis upon which the Final Permit Decision is based.

The Permit fails to establish a compliance schedule for completion of the RCRA Facility Investigation ("RFI") and other corrective action even though a 1994 RCRA Facility Assessment identified extensive contamination at the facility as a result of past operations. As a result, ISOCI is being allowed to delay evaluation of groundwater contamination and soil vapor intrusion until after the RFI has been performed, whenever that is. Furthermore, the cost closure estimates approved by DTSC are unrealistically low, creating the potential for unfunded cleanup by the public. Granting this Petition will allow DTSC to address clearly erroneous conclusions of law concerning the necessity of a compliance schedule for corrective action.

Finally, DTSC failed to respond to all of the comments submitted by CBE. Significantly, the Response to Comments ignores all 28 pages of comments on the DEIR submitted by CBE's expert consultant, Julia May. Those comments describe significant defects in the DEIR, including underestimation of earthquake danger and failure to evaluate significant potential impacts of earthquake-related fire, smoke, and hazardous air pollution. DTSC's failure to respond to the significant environmental issues raised by Ms. May's comments violates the requirements of 22 CCR § 66271.16 and Public Resources Code § 21091(d).

Conclusion

The issues described above raise important legal and policy considerations that DTSC must address and correct prior to issuing this Permit. For these and the many other reasons stated herein, CBE, ProUno and CCAT respectfully urge DTSC to grant this Petition, set a briefing schedule for the appeal pursuant to 22 CCR § 66271.18(c), and refrain from issuing this Permit until the appellate issues raised herein have been resolved favorably to CBE, ProUno and CCAT.

I. PUBLIC PARTICIPATION

CBE submitted extensive and detailed comments explaining serious shortcomings in the public participation process for the Draft Permit and the Draft EIR. DTSC has failed to correct these deficiencies and its responses to CBE's comments indicate that DTSC does not comprehend the magnitude of the problems or desire to improve upon its public participation efforts in future permit processes for other facilities.

A. Tanner Act Community Involvement Process

DTSC is attempting to issue a permit for a large hazardous waste facility without requiring compliance with the Tanner Act, Health & Safety Code §§ 25199, *et seq.*, which establishes a detailed process that ensures community involvement in significant land use decisions concerning hazardous waste facilities. DTSC and ISOCI have acknowledged that the proposed expansion of the facility will require issuance of a Conditional Use Permit ("CUP") by the City

of Los Angeles, thereby making the Project a "land use decision" as defined in Health & Safety Code § 25199.1(e) that is subject to the requirements of the Tanner Act.

The Tanner Act requires project proponents to file a notice of intent to make the application for a CUP with the Office of Permit Assistance in OPR at least 90 days before applying for the CUP. *See* Comment 4-91; *see also* Health & Safety Code § 25199.7(a). The City then is required to publish notice of the proposed project in the local newspaper, post notices in the affected area, and notify by direct mail contiguous property owners. *See* Health & Safety Code § 25199.7(a). Once the application for the CUP is complete, the City has up to 30 days to form a seven-member local assessment committee to advise it in considering the land use application. *See id.*, § 25199.7(d). The local assessment committee advises the City as to community concerns, conditions necessary to protect human health and the environment, and compliance with CEQA. *See id.*

In Comments 4-91 and 15-11, CBE and CCAT explained that the statutory scheme makes it clear that the Tanner Act community involvement process should run simultaneously with the CEQA process to ensure the public's meaningful involvement. While stating that it agrees that the Tanner Act process should run simultaneously whenever possible with the CEQA process (*see* Response to Comment 4-91), DTSC has made a final decision on the Permit, completed the CEQA process, and issued a Final EIR before the Tanner Act process is even scheduled to begin. As noted in Comments 4-91, 15-11 and 16-5, this is exactly the scenario the Legislature sought to prevent by passing the Tanner Act: "Present procedures for approving hazardous waste facilities do not provide meaningful opportunities for public involvement and are not suitably structured to allow the public to make its concerns known and to cause those concerns to be taken into consideration." Health & Safety Code § 25199(a)(3).

ISOCI filed a conditional use permit application with the City on August 1, 1996 and OPR conducted a pre-application meeting with the public that same year. As noted in Comment 4-90, the City concluded that the application was incomplete on March 12, 1997, but ISOCI failed to take any action to correct the deficiencies. The City took no further action because the application lay dormant for years, and DTSC states in its Response to Comment 4-91 that "[t]he City terminated all proceedings on the CUP application on December 20, 2004 due to lack of activity." CBE understands that ISOCI has been informed by the City that it will need to submit a new CUP application.

In its Response to Comment 4-91, DTSC asserts that even though it moved forward with the environmental review process under CEQA, it views "the concurrent actions by ISOCI and the City as they relate to the Tanner process as occurring simultaneously and in compliment [sic] with each other as required under both Acts." This assertion is simply wrong and not credible. It was unreasonable for DTSC to rush to issue this Permit without meaningful community involvement when ISOCI has not made any reasonable progress toward obtaining a CUP even though it has had more than ten years in which to do so. In fact, DTSC's ineffective public participation process and work on this Permit wasted valuable state and community resources. Now ISOCI will have to submit a new CUP permit application, wait for the Tanner Act

community involvement proceedings to commence - including establishment of a Local Assessment Committee, and wait for the Tanner Act proceedings to complete.

Before the City can issue a CUP, the Community Redevelopment Agency of Los Angeles ("CRA/LA") must review the CUP application for conformance with the Redevelopment Plan for the Adelante Eastside Redevelopment Area. CRA/LA has indicated that the Project conflicts with the Redevelopment Plan. *See* Comments 2-7 through 2-14. DTSC indicates in its Response to Comment 4-90 that the Los Angeles City Council also must find that the Project is consistent with the Los Angeles County Hazardous Waste Management Plan. As noted in Comments 4-90 and 15-10, under Health & Safety Code § 25135.4, DTSC may not approve the Project until this consistency determination has been made. Before ISOCI can expand its operations at the facility, it must obtain a CUP from the City, CRA/LA must make a determination that the Project conforms with the Redevelopment Plan, and the City Council must find that the Project is consistent with the County Hazardous Waste Management Plan. The Tanner Act process and these necessary steps will take many months, during which time environmental conditions, aspects of the Project, and potential impacts on the surrounding community all may change.

Moreover, as explained in Comment 4-91, a full and comprehensive process must be established to allow the community surrounding the facility to have meaningful input in the environmental and land use review for ISOCI's proposed expansion. The community involvement process mandated by the Tanner Act is the appropriate way to engage the community and address issues of environmental justice. CBE requested in Comment 16-1 that DTSC coordinate the permitting process with Tanner Act requirements before it issues the Permit and certifies a Final EIR. The statute reflects the recommendations of the Hazardous Waste Management Council, a state task force that was concerned with the lack of coordination between state and local permitting agencies for hazardous waste facilities and inadequate opportunities for public involvement. Such coordination is contemplated by the Tanner Act:

> Any public agency may request another public agency to jointly review applications for a permit or land use decision for a hazardous waste facility project. A public agency may consolidate, with other public agencies, public meetings and hearings permitted or required by law or regulation for the issuance of a permit or the making of a land use decision for a hazardous waste facility project.

Health & Safety Code § 25199.3(b). All DTSC has done, however, is include in the Permit a special condition stating that "the Permit shall not become effective until the applicant is granted a local land use permit." *See* Special Condition 2.u., page 51, Section V, Permit. This does not remedy DTSC's failure to coordinate its evaluation of the Project to run simultaneously with the Tanner Act process so that decisions about hazardous waste issues are not artificially divorced from the land use issues, and to ensure the public's meaningful involvement. Furthermore, ISOCI cannot proceed with the Project, notwithstanding the Permit, until the City issues the CUP.

In its Response to Comments 4-90 and 4-91, DTSC asserts that it does not have authority to require ISOCI to submit a CUP application or require the City to begin the Tanner Act process. DTSC also asserts that under Health & Safety Code § 25199.3 it cannot refuse to issue a permit for a hazardous waste facility on the grounds that the applicant has not been granted a land use permit and that it must move forward with the permitting process. This is faulty statutory interpretation. The relevant statutory provision is entitled "Applications for a permit or land use decision for hazardous waste facility projects; simultaneous submission; review," and reads:

> Notwithstanding any other provision of law, an applicant for a hazardous waste facility project *may submit applications for a land use decision and for one or more permits to the appropriate public agencies simultaneously.* Unless a state agency is prohibited by statute from approving a permit before the granting of a local land use decision, the state agency shall not refuse to issue a permit for a hazardous waste facility project on the grounds that the applicant has not been granted a land use permit, except that the state agency may provide that the permit shall not become effective until the applicant is granted a local land use permit.

Health & Safety Code § 25199.3(a) (emphasis added). The statutory language must be interpreted as a whole, and the entire provision refers specifically to simultaneous submission. ISOCI has not simultaneously submitted a CUP application to the City of Los Angeles and to DTSC. In fact, ISOCI does not even have an actively pending CUP application. DTSC cannot skip over the first part of a statutory provision, the condition precedent, and then latch onto subsequent conditions that apply to that unmet precedent. Applied properly, the statutory provision means that had ISOCI simultaneously filed its land use permit application and its hazardous waste permit application at the same time and, for instance, the land use portion was protracted, then DTSC should still issue the hazardous waste permit notwithstanding delayed issuance of the land use portion. Based on the plain language of the statutory provision that DTSC relies upon, DTSC has no grounds for issuing the Permit prior to ISOCI's application for the required land use permit.

By failing to coordinate the permitting process with Tanner Act requirements, DTSC is effectively rewarding ISOCI for delaying the resubmission of its CUP application to the City. As a result, DTSC is undermining the community involvement process required by the Tanner Act, and in the process violating DTSC's stated commitment to effective public participation. This is especially problematic because the Project will impact the future health and safety of the surrounding community. If DTSC issues this Permit, it will create pressure on the City to grant a CUP to ISOCI without imposing additional requirements or modifications to the Project to better protect public health and safety or be more consistent with local land use plans because such changes would require ISOCI to obtain a new Permit and delay the proposed facility expansion. Furthermore, DTSC's approval of the Permit will be used by Project proponents to argue that if the agency with expertise on the subject matter did not require additional protections for the surrounding community, then neither should the City. The timing will also create an incentive for the City to ignore input from the public received during the Tanner Act process and increase the likelihood that public involvement will come too late for effective participation.

If the City does address and respond to input from the public received during the Tanner Act process, it will likely not issue a CUP for the Project or require substantial modifications to the Project. Either way, DTSC's permitting process will have been a substantial waste of time and resources because ISOCI would be required to return to DTSC to obtain a new permit for a proposal that is consistent with the project approved by the City.

DTSC's decision to separate the environmental review and permitting process from the Tanner Act community involvement process also will be confusing to community members and discourage members of the public from participating in the Tanner Act process because of the time commitment involved in participating in multiple public participation processes for the same project. This is fundamentally bad public policy.

In Comment 16-3, CBE stated that DTSC's ad hoc process of holding meetings with individual community groups after the comment period was extended undermines the Tanner Act process by lending a false sense of legitimacy to the permitting process, providing different information to different members of the public, and not facilitating information sharing among interested community members. CBE also noted that DTSC provided inaccurate information about public participation activities at one of the community meetings and never mentioned the Tanner Act requirements.

Even after CBE pointed out problems in its comments submitted in February 2006, DTSC did not improve public participation. As CBE pointed out in Comment 16-2, DTSC failed to notify CBE of community meetings despite CBE's request that it be notified of such events. DTSC's Response to Comment 16-2 includes the statement that it was not in a position to ask for attendee lists at the community meetings. DTSC certainly could have requested an attendee list, or at least requested of the meeting organizers that they invite CBE and other entities that had specifically expressed desire to attend community meetings.

For the reasons discussed above, DTSC's decision to issue a permit for the ISOCI facility without requiring compliance with the Tanner Act is based on findings of fact and conclusions of law that are clearly erroneous, and raises important public policy considerations. CBE demands that this Permit not be issued, and that DTSC not issue a Notice of Determination, until the community has had the full right and opportunity to participate in the review process through the Local Assessment Committee that will be established under the Tanner Act.

B. Spanish Translation of Key Documents

DTSC's environmental justice principles require that environmental and health-related information be provided to low-income and minority communities in appropriate languages, and that the agency will encourage early and continuous public involvement. *See* Comment 4-3; *see also* DTSC "Draft Environmental Justice Policy," available at <http://www.dtsc.ca.gov/Laws RegsPolicies/Policies/EnvJustice/upload/OEA_POL_DRAFTEJ.pdf> (principle no. 8).[1]

[1] Additionally, Chapter Four of DTSC's Public Participation Manual states that fact sheets must be "written as free of technical jargon as possible, in all appropriate languages for the community, and at a reading level that is

However, only the fact sheet, public notice and one-page comment form were translated into Spanish even though the facility is located adjacent to Spanish-speaking communities. In response to public pressure after the comment period had begun, DTSC belatedly translated the executive summary of the Draft EIR. DTSC's failure to provide all key documents in Spanish, including the DEIR is arbitrary, violates DTSC's own environmental justice policy, and raises serious public policy concerns.

CBE expressed deep concern about the lack of Spanish translation documents during the public comment period on the Draft EIR. In its Response to Comment 1-2, DTSC states that it "received no specific requests from members of the community for additional information on the project to be translated into Spanish beyond the Fact Sheet and Public Notice." This response fails to acknowledge that proactive public participation efforts are necessary in areas with primarily minority and low income populations and is flawed in several ways.[2]

DTSC would not receive specific translation requests from members of the community. In fact, no one from the community attended the January 2006 public hearing even though a Spanish translator was available, because the community was not properly canvassed and DTSC relied on mailers rather than utilizing community organizations to spread the word about the hearing. In contrast, just two months later the Boyle Heights Neighborhood Council succeeded in turning out numerous members of the community at its meeting, where CBE understands many local residents voiced their opposition to the Project. By this point, well into the process, after oral public comment period had closed and just before the written comment deadline, community members might have thought it too late to start to translate the foundational document.

In its Response to Comment 1-2, DTSC also states that by extending the public comment period an additional 60 days, those in the community with limited English language skills had sufficient time to seek out translation services. It is unrealistic to assume that members of a low-income community will seek out their own translation services for technical documents because most residents of the adjacent communities do not have the time or resources to obtain translation services. Similarly, community groups that represent the residents are mostly volunteer-based organizations with little if any funding to provide translation services. DTSC's translation of the fact sheet, DEIR Executive Summary and comment form are not enough, as these documents do not fully describe the activities which ISOCI wishes to conduct, or the relevant risks posed by them.

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understandable by the typical resident of the community." Chapter Two of the Manual provides that information must be provided "in a manner comprehensible to the lay person." This requirement should be followed for any document on which DTSC is seeking public input.

[2] In its Response to Comment 4-3, DTSC refers CBE to its Responses to Comments 1-2, 1-3, and 2-15. Comments 1-3 and 2-15 do not address Spanish translation issues, except to state that DTSC provided a Spanish translation of the Notice of Preparation in 1995, translated the fact sheet, and took steps in December 2005, such as publishing public notices in Spanish and broadcasting Spanish radio announcements on a single day. In its Response to Comment 2-15, DTSC lists outreach activities but noticeably omits dates for the various activities.

According to CalEPA's Proposed Recommendations for a Public Participation Policy (May 18, 2005), "roughly a third of CalEPA community outreach is done in communities where there are significant numbers of non-English speaking residents. Currently each BDO provides varying levels of translation. Within the general guidelines for public participation there will be guidance pertaining to an assessment of the need to translate documents, and including translation and interpretation services within communication strategies." CalEPA recommendations also state that the agency "will encourage communication in non-traditional ways when appropriate; for example, use 'universal' pictures to convey complex ideas of (or to supplement) technical written materials and blueprints." CBE is pleased that CalEPA is trying to provide further guidance on conducting public participation, including translation and communication practices. DTSC should follow this guidance and restart the public participation process after preparing Spanish versions of all key documents, as well as summaries of those documents using non-technical language, or rescind the documents and allow the City of Los Angeles to act as lead agency.

Finally, DTSC has not translated the newest Permit-related and environmental review documents into Spanish, including the amended public notice setting forth the period in which to submit petitions for review and critical documents including the Final EIR, the Final HRA, and the Permit. This prevents equal involvement in the permit appeal process by Spanish-speaking members of the community.

DTSC must translate into Spanish all relevant documents for the Permit and environmental review and provide other documents in Spanish that explain the technical documents at a level of detail that members of the community can understand. Before this Permit is issued, DTSC must make these translated documents available to the communities adjacent to the ISOCI facility by restarting the permitting process and coordinating it with the Tanner Act community involvement process.

C. Community Outreach and Notification of Concerned Parties

DTSC's outreach and public notification efforts were woefully inadequate and require correction. In its Response to Comments 1-3 and 16-4, DTSC lists the public participation activities that were conducted in late 2005 and early 2006. However, the number of activities is not relevant if the activities fail to adequately inform the community, engage the community in the public participation process, and establish communication between members of the community, DTSC and ISOCI. Chapter Two of DTSC's Public Participation Manual states that "DTSC's public participation program is not a public relations tool in the sense that public relations is 'one-way' communication. It is DTSC's policy to create a dialogue with all stakeholders to ensure that their concerns and priorities are incorporated into each project." DTSC must re-evaluate its public participation efforts for this Project, restart the public participation process in coordination with the Tanner Act community involvement process, and undertake actions necessary to engage the community that will be impacted by the Project.

The outreach and notification activities were reasonably calculated to fail. In Comments 4-5 and 15-2, CBE and CCAT expressed their concern that DTSC's official mailing list was inaccurate

and out of date. Not all of the proper parties were notified about the ISOCI Project during the comment period on the Draft Permit. DTSC's Response to Comments 4-5 and 15-2 state that DTSC updated its mailing list in August-September 2005 and that the list was based on DTSC guidelines. CBE is specifically informed, however, that local elected officials, including Los Angeles City Council Member Jose Huizar, Assemblyman Fabian Nuñez and State Senator Gil Cedillo, as well as the Community Redevelopment Agency of Los Angeles, did not receive any notification when the comment period was announced in December 2005. CBE cannot understand how DTSC's supposedly updated mailing list did not include these community representatives, although it is possible that the resources DTSC used to compile its list themselves were out of date. CBE is unable to review DTSC's mailing list because it was not made available as part of the public record for this permit decision. As a result, CBE cannot determine how many other key parties were not notified about the public participation process. CBE requests that DTSC make available the mailing list it used for this Permit.

DTSC's Response to Comment 4-5 also states that DTSC updated its mailing list to include addresses within a quarter-mile radius from the ISOCI facility. One-quarter mile is only 1,320 feet. This is not a sufficient geographical area for the mailing list because residents and businesses only slightly further away also will be impacted by the Project and are also subject to risks from a catastrophic release of hazardous waste at the facility. DTSC must restart the permitting process, coordinate it with the Tanner Act community involvement process, and provide notification to all residences and business within one mile of the facility.

D. Availability of Public Documents

In Comment 4-6, CBE explained that core documents related to the proposed action were largely inaccessible to the communities that DTSC should have targeted, as well as out of town consultants. DTSC must stop the practice of requiring members of the public to travel to document repositories to review project documents and copy them at their own cost. CBE described its problems in obtaining project documents in its February 2006 comments. DTSC's Response to Comment 4-6 apologizes for any misunderstanding, disputes that CBE submitted a Public Records Act request to review the administrative record files, and repeats DTSC's process for providing public access to documents. This does not begin to address or correct the problem.

First, DTSC must begin requiring companies to electronically submit all documents related to a permit decision so they can be easily posted on the DTSC website and downloaded by members of the public. A repository also should be maintained with hard copies for those who cannot access documents electronically or wish to view the documents in person. DTSC has required other facilities to electronically submit documents for review during public comment periods and should require the same of ISOCI. This will save DTSC and members of the public time and money, and will help increase public involvement in DTSC permit decisions. Even if core documents were not submitted in electronic form by ISOCI, DTSC should have promptly scanned those documents and uploaded them to the DTSC website, along with Spanish translations, so that they were accessible to members of the public. DTSC has committed to do

just this in its environmental justice principles. *See* DTSC "Draft Environmental Justice Policy," principle no. 8.

Second, when DTSC posts documents on its website during a comment period for a facility, they must be posted at the beginning of the comment period, not near the end. On January 23, 2007 – less than ten days before the close of the original period for submitting petitions for review on this Permit – DTSC posted three core documents on its website, including the 225-page Response to Comments and the Mitigation Measure Monitoring and Reporting Plan. If these documents had been posted on the website at the beginning of the comment period, general members of the public would not have been forced to travel to the document repository to obtain them. This was especially discouraging because DTSC's public notices stated that the Response to Comments were posted on the DTSC website. DTSC's practice of posting relevant documents near the end of a comment period ends up wasting the time and money of those who visited a document repository because documents were not available electronically.

Third, the entire administrative record for a facility needs to be considered part of the official permit files that are made available for public review during a comment period. In Comments 4-7 and 16-2, CBE noted that the entire administrative record for the ISOCI facility was not made available at the beginning of the public comment period. Many hazardous waste facilities have a long history with DTSC and a proposed decision to grant or modify a permit for such a facility must be viewed in the context of the facility's history, overall operational requirements, and compliance record, not in a vacuum. CBE requested that DTSC restart the public participation process with a new public comment period and make available for review an adequate, organized, and complete administrative record. In its Response to Comment 4-7, DTSC claims the complete administrative record was available at one location and blames members of the public for any disorganization. DTSC must correct the problem by restarting the permitting process after making available an adequate, organized and complete administrative record for online review, as requested by CBE, and coordinating this review with the Tanner Act community involvement process.

DTSC's practice of providing only the permit application, risk analysis documents, and draft permit (as it did here) is arbitrary, bad policy, and insufficient to provide the public with an accurate perspective on a facility and its proposed operations. Documents related to the facility's enforcement and compliance history, previous permit actions and/or authorizations, and correspondence between the facility and DTSC contain important and relevant information that must be available for consideration by members of the public. DTSC must begin scanning the administrative record files of the facilities it regulates and develop an online clearinghouse for these documents.

E. Description of Proposed Activities in Fact Sheet

In Comment 4-4, CBE noted that the fact sheet produced by DTSC failed to adequately describe the Project, including the ISOCI facility's plans to accept hundreds of new waste codes and store up to 250,000 gallons of hazardous waste in rail cars without an adequate containment system. The notice also glossed over ISOCI's enforcement history. In its Response to Comment 4-4,

DTSC asserts that the "public notice was meant to serve as a guidance for all interested persons as to where they may find more detailed information about a proposed project." CBE, ProUno and CCAT maintain that the public notice was misleading in its description of the facility and the proposed activities, as described in Comments 4-4 and 15-3. The fact sheet is the first document that the public views when deciding whether or not to seek further information about a facility. Therefore, it is extremely important that the fact sheet describe and disclose important information about the facility that might be relevant to members of the public, including the facility's current operational and compliance status and an accurate description of the proposed activities for which authorization is sought. DTSC must prepare and circulate a new fact sheet before restarting the public participation process.

An article published in the January 26, 2007 edition of Inside CalEPA highlighted problems with DTSC's public participation efforts for this Permit and for processes at other hazardous waste facilities. *See* Exhibit A (Inside CalEPA article, Jan. 26, 2007). The article states that DTSC's failure to follow public participation requirements mandated by law is so widespread that environmental justice groups are set to challenge DTSC's efforts at several facilities, including ISOCI. *See id.* CBE requests that DTSC refrain from issuing the Notice of Determination for this Project until DTSC or the City of Los Angeles has restarted the public participation process and coordinated this process with the Tanner Act community involvement process for the ISOCI facility, important Permit-related and environmental review documents have been translated into Spanish, and notification of the new public participation opportunity has been provided to all residences and business within one mile of the facility.

II. PERMIT CONDITIONS

A. Rail Car Storage Containment

The Permit would allow ISOCI to store up to 250,000 gallons of hazardous waste in rail cars for up to one year on a rail spur without adequate secondary containment.[3] Storage of this amount of hazardous waste for such an extended period of time in rail cars is unprecedented in California and poses severe risks to the surrounding community that have not been properly analyzed. A catastrophic release of hazardous waste could result from an earthquake that causes railcars to tip over; derailment, collision or other accident that causes rail cars in transit to tip over or rupture; a chemical reaction or explosion in a rail car that causes the rail car to rupture, deterioration or faulty repair of a rail car that causes it to fail, or an act of vandalism or terrorism. *See* Exhibit B (Comments of Julia May on Behalf of CBE). A catastrophic release of hazardous waste from rail cars would expose local residents and workers, as well as commuters on MetroLink, to air toxic contaminants, including emissions of carcinogenic substances. The environmental review, however, contains no analysis of the impacts from a catastrophic release of hazardous waste from rail cars at or near the facility, nor has DTSC required adequate secondary containment for

[3] Part II.5. of the Permit states that "[a] full rail car may store up to 250,000 gallons of waste." This is incorrect. There is no indication in the available documents that ISOCI proposes to use rail cars that can store more than 25,000 gallons each. DTSC should correct this statement and remove any suggestion that ISOCI can use rail cars with storage greater than 25,000 gallons.

the rail cars. In its comments, CBE noted that ISOCI's proposal to store hazardous waste in rail cars appears to be an attempt to avoid the stringent requirements that apply to stationary storage tanks. CBE urged DTSC to require that storage of hazardous waste be conducted in stationary storage tanks, which are better suited to long-term storage for reasons including mandatory periodic integrity assessments and seismic stabilization.

In its Response to Comment 4-8, DTSC states that the Rail Car Loading and Unloading Unit is regulated as a bulk container storage unit and that "DTSC has determined that this unit complies with all of the regulatory requirements for a Container Storage Unit as specified California Code of Regulations, title 22, Division 4.5, Chapter 14, Article 9." CBE does not dispute that a rail car meets the definition of a bulk container in 22 CCR § 66260.10. However, long-term storage of hazardous waste in rail cars with the type of secondary containment system proposed by ISOCI is entirely different from the type of container storage area for which the hazardous waste regulations were intended, i.e., storage of 55-gallon drums or larger totes of hazardous waste in walled containment basins. Merely because the Rail Car Loading and Unloading Unit complies with some regulatory requirements does not mean it is safe and protective of human health and the environment, particularly when the Unit is not used for the purpose for which it was intended.

The regulations require secondary containment due to the simple fact that containers frequently fail or rupture. Proper secondary containment must be capable of containing all releases of hazardous waste from containers, which is achieved with a walled containment basin. The containment system that ISOCI proposes to install for the rail spur, however, cannot contain all possible releases from the rail cars.

ISOCI proposes to use 6 inch deep spill pans to initially capture liquid released from rail cars, which would be drained via 4 inch drain pipes to two sump pumps that would propel the liquid into Tank 800. DTSC appears to have determined that the proposed rail spur containment system meets the regulatory requirements for a hazardous waste container storage area simply because Tank 800 is able to contain the required *volume* of released hazardous waste, plus precipitation and any other liquid run-on into the containment system. But the "active" secondary containment system this project would include incorrectly assumes that drain pipes do not clog or otherwise become obstructed with all of the hazardous waste that could be released from the rail cars and pumped into Tank 800, and that sump pumps do not malfunction or lose power.

EPA has expressed serious concern with the type of secondary containment system that ISOCI proposes to install and an EPA RCRA policy memo demonstrates that EPA does not prefer these "active" secondary containment systems. *See* EPA RCRA Permit Policy Compendium Memorandum 9483.1989(06) from Sylvia Lowrance to Al Patton. "Active" systems involve the use of operational controls and equipment (pans, pipes, pumps) to convey and contain released liquid while "passive" systems rely on berms, barriers and walls to contain all released liquid without the need to transfer it to another unit. The EPA memo was prepared in response to an inquiry seeking concurrence that a sump and pump arrangement to remove accumulated liquids

achieves the standard of the regulations for secondary containment. The EPA memo states that "...any system that uses operational controls as a partial substitute for standard secondary containment (barriers) will be closely scrutinized to ensure that the level of environmental protection afforded by barriers is not compromised." Furthermore, "...the risk of release to the environment is much less when a full barrier is used, as opposed to relying on a downsized barrier operated in conjunction with pumps. The chances of a mechanical device (pump) malfunctioning are significantly greater than with a passive measure, i.e., barrier. Examples of failure that may be associated with pumps are loss of power and clogging."

The proposed containment system relies on two sump pumps to convey liquid spilled from a rail car into a remote storage tank. In its Response to Comments 4-9 and 4-10, DTSC asserts that the sump pumps are able to pump the entire contents of a rail car to Tank 800 in less that two hours and that the facility will have a backup power supply in the event of a commercial power failure. DTSC also states that the containment system is not required to hold the maximum potential volume of hazardous waste, only the amount required by the regulations. DTSC misses the point. Its determination is inconsistent with the intent of the regulations and the statutory objectives of RCRA, which are to assure "that hazardous waste management practices are conducted in a manner which protects human health and the environment," and to require "that hazardous waste be properly managed in the first instance thereby reducing the need for corrective action at a future date." 42 U.S.C. § 6902(a)(4)-(5).

The Permit should protect against worst case scenarios but does not. In a worst-case scenario, a fully-loaded tank car would rupture and release its contents into the containment system in a matter of minutes, or even less. The spill pans are only 6 inches deep and 125 inches wide. The limited storage volume of the pans thus cannot contain the capacity of half of one rail car, let alone 25,000 gallons of hazardous waste in a fully-loaded rail car. Even if a containment pan was completely dry at the time of a catastrophic release, its trays would be overtopped. If a containment pan already held rainwater or a rail car rupture occurred during a rain event, the loss of hazardous waste outside the containment system would be greater. DTSC's focus on the pumps' ability to empty the contents of a rail car in a matter of hours is the wrong analysis when the entire contents of a rail car could be released in minutes.

The two pumps have just enough capacity (as calculated by the responsible engineer) to keep up with a spill resulting from an open valve at the base of a staged tank car. This is incorrectly described in the Part B application as providing redundancy, a statement that DTSC repeats in its Response to Comment 4-8. To the contrary, true redundancy would require the presence of excess pump capacity (e.g., additional pumps) rather than the bare minimum to maintain containment. Furthermore, the engineer's calculation, performed to demonstrate adequacy of the selected pumps, includes a mathematical error. Using the input values provided by the engineer, the predicted flow would exceed the pump capacity, in contrast to the conclusion reached by the design engineer (reference calculations performed by J. Johnson on Jan. 7, 1997). The design engineer's calculation is based on a fully-opened 3.5 inch valve, which is not a universally-applied standard in the rail industry. In fact, the design engineer's sketch of the system describes the valve size as the "average" for all rail cars. The design should be based on a *worst case*

valve size, not an *average* valve size. With only a slightly larger 4 inch valve, which is the most typical construction on non-pressure tankers currently in operation, the estimated flow exceeds the combined capacity of the two pumps by more than 140 gallons per minute. With a 6 inch bottom outlet valve (another typical construction), the calculated spill rate from the tank car would exceed pump capacity by approximately 750 gallons per minute. The design engineer's calculation relies on an atypical 3.5 inch valve but there is no provision in the facility operating procedures or the Permit that would limit rail cars entering the facility to only those with 3.5 inch valves or similar construction.

The design engineer also did not take into consideration the properties (viscosity and density) of the fluid being pumped, friction losses in the conveyance line between the pumps and Tank 800, or static head pressure. In the proposed containment system, the collection sump is buried and the storage tank is above ground. Under a worst case scenario (maximum flow and a nearly full tank), the pump discharge pressure would reach 40-45 pounds per square inch. At this pressure, the pump could be expected to produce only approximately 150 gallons per minute, or 65% of the estimated leak rate. Simply put, the flow capacity of the pumps selected in this application will not exceed the estimated leak rate (based on an atypical 3 inch valve), as estimated by the design engineer.

The Part B application also fails to include sufficient design information to determine if the 4 inch drain line leading from the spill pan will drain at a rate sufficient to prevent overtopping of the pan(s). For example, the engineer should have provided the slope of the collection line (which determines the rate at which released fluids will flow under gravity drainage into the sumps) and details on the sump construction, among other basic elements. The design drawings in the Part B application are unclear as to where the sumps are located. At a minimum, the design engineer must provide a full set of drawings, including a process and instrumentation diagram, to more clearly show how the containment system is built and expected to operate. Estimates based on likely piping slopes suggest the lines will not drain at a rate even close to the estimated spill rate from a rail car. There also has been no demonstration by ISOCI or DTSC that the drain lines will be protected against obstruction from debris accumulation and fouling due to insects or rodents.

Another major flaw with the proposed spill pan containment system is the narrow width of the spill pans. The average railroad chemical tank car has a tank diameter of approximately 112 inches, while ISOCI's proposed spill pans are only 125 inches wide. This leaves only 6.5 inches of spill pan extending outward from the tank on either side of the rail car. If a rail car were to tip over due to an earthquake or explosion, it would fall outside of the spill pan, releasing hazardous waste directly to the ground and rendering the "active" containment system useless. Further, if a rail car sidewall was damaged and caused a release, the rate and pressure of the released liquid could cause hazardous waste to spray out beyond the area covered by spill pans. In contrast, the walled containment basins preferred by EPA fully contain waste released from containers that tip over or whose side walls rupture.

For all of the reasons discussed above, DTSC's decision to issue a permit for the ISOCI facility that allows a wholly inadequate "active" secondary containment system for the rail spur is based on findings of fact and conclusions of law that are clearly erroneous, and raises important public policy considerations. Long-term storage of hazardous waste in rail cars is inherently dangerous and unsafe, as noted in Comment 15-4, and DTSC should not allow such storage at the ISOCI facility. All of the rail cars on the rail spur could come off the rails at the same time in an earthquake. If DTSC allows ISOCI to store hazardous waste in rail cars for extended periods of time (which it should not), then CBE demands that at a minimum DTSC amend the Permit to require ISOCI to install a passive secondary containment system for the rail spur consisting of an impermeable basin and walls that can contain the necessary volume of hazardous waste and precipitation.

B. Acceptance of Additional Waste Codes

The Permit authorizes ISOCI to radically expand the scope of operations at the facility without providing sufficient protections against the new risks posed by the facility's acceptance of hundreds of additional types of hazardous waste. ISOCI's current operations consist of used oil blending and recycling, and antifreeze collection and transfer. As a result, the facility currently accepts only a limited number of waste codes that include wastes such as used oils, oil/water mixtures, and antifreeze. The Permit would allow the facility to take hundreds of RCRA waste codes and state waste codes that are not currently accepted, which include ignitable, carcinogenic, and extremely toxic wastes.

The Permit authorizes ISOCI to accept wastes containing cyanides, hydrogen cyanides, phosgenes, phosphines, methyl isocyanates, benzenes, chlorines, fluorines, veterinary pharmaceuticals containing arsenic, halogenated solvents, wastes from secondary lead smelting, discarded commercial chemical products, container residues, and spill residues, among others. By their very nature, hazardous wastes such as these exhibit adverse physical, chemical, and reactive properties, especially when handled improperly or mistakenly. The Permit effectively will allow ISOCI to transform a standard used oil facility into a massive hazardous waste transfer, treatment, and storage facility that would handle hundreds of additional chemicals. As explained in this Petition and in CBE's comments submitted in February 2006, DTSC has failed to adequately evaluate the greatly increased health risks to the surrounding community resulting from acceptances of hundreds of new waste codes, and DTSC has failed to include sufficient conditions in the Permit to guard against these risks.

The hazard posed by acceptance of hundreds of additional chemicals is compounded because the personnel that will handle the new wastes have no experience tracking, managing, and monitoring such a large number and volume of hazardous wastes at the facility. Furthermore, even if they receive appropriate training, facility personnel have no experience with the many toxic constituents that are not currently accepted by ISOCI. With a greatly increased volume of incoming waste shipments, the facility will be unable to test most shipments of hazardous waste and will have to rely on generators to provide accurate information about the many wastes. CBE has pointed out that waste analysis of numerous processes, complex blends, and variable

chemicals received from hundreds of generators, as is the case here, can be extraordinarily challenging and dangerous because a generator could improperly profile its waste, blend other wastes in order to dispose of material, or otherwise commit a mistake. ISOCI's reliance on information provided by generators, combined with the facility's poor history of compliance and lack of experience with the hundreds of waste codes that will be accepted, makes it foreseeable that the facility will accept wastes it is not authorized to store or treat and will be unable to properly segregate, manage, and track the wide range of new chemicals.

In addition to accepting hundreds of new waste codes, ISOCI proposes to conduct activities such as fuel blending, waste brokering, and treating hazardous wastewater that will significantly increase the risk that ignitable, carcinogenic, and extremely toxic wastes will be mishandled and accidentally mix and react. ISOCI also proposes to greatly enlarge the facility's storage capacity, including storing unprecedented quantities of hazardous waste in unsafe rail cars. Because the facility is located on a relatively small property, different types of wastes will have to be stored in close proximity to each other. An explosion or other reaction among wastes at the facility likely could result in a fire that spreads rapidly and involves many types of waste, including used oil and petroleum. *See* Exhibit C, pages 13-14 (U.S. Chemical Safety and Hazard Investigation Board Investigation Digest of Third Coast Industries Fire). Such a fire, especially one that involved ignitable waste and petroleum waste, could have synergistic effects and create an uncontrollable conflagration that exposed the surrounding community to carcinogens and other toxic air contaminants for an extended period of time. *See id.* DTSC has not evaluated the risks of such an accident scenario or included permit conditions to minimize the risk of such an event.

As noted in Comments 4-30 and 4-31, the facility has a poor compliance record. If ISOCI is unable to follow and comply with the requirements applicable to its current scope of limited operations, there is little chance it will be able to comply with the many additional and more complicated requirements and precautions applicable to the activities proposed for the facility's expansion, requirements that are necessary to protect public health and safety, and the environment. The enforcement history combined with the risks of a greatly expanded scope of operations necessitates that the Permit, if ultimately granted, be strengthened to protect the surrounding community, that already is disproportionately impacted by elevated exposures from nearby industrial facilities. CBE requests that DTSC amend the Permit to significantly limit the number of new waste codes that the facility can accept, and to require ISOCI to demonstrate that it has safely managed a limited number of additional waste codes before it may accept more waste types.

C. Waste Analysis Plan

In Comment 4-13, CBE stated that the Waste Analysis Plan ("WAP") described in ISOCI's Part B application is complex and difficult to understand, and will be challenging to implement even with highly educated and trained personnel. CBE requested that DTSC require ISOCI to explain its staffing plan for implementation of the WAP and describe the qualification requirements for relevant positions, and that DTSC ensure that ISOCI's staffing and training plans are sufficient.

In its Response to Comment 4-13, DTSC makes the conclusory statement that the WAP and proposed personnel training meet the requirements of 22 CCR §§ 66264.13 and 66264.16. DTSC, however, neither explains how it has determined that these documents meet the requirements of applicable regulations, nor directly responds to the issues raised by CBE.

Specifically, in its Response to Comment 4-13, DTSC states that Figure III-2 of the WAP - which the WAP describes as providing a flow chart of the waste receiving procedures - exists in the Part B application. Figure III-2 is not included in the version of the WAP that was made available during the public comment period. DTSC acknowledges this in its response, and states that Figure III-2 now is available upon request. Figure III-2 should have been made available to the public along with the rest of the permit-related documents, and DTSC has not explained why it was not.

CBE pointed out in Comment 4-13 that the WAP states that waste analysis tasks, including sampling, "normally" will be performed by trained personnel. DTSC asserts that all ISOCI personnel who will handle hazardous waste will be required to have extensive training, including training that complies with Cal/OSHA HAZWOPER 24-hour requirements, and refers to Volume III, Section IX of the Part B application. This section was prepared in June 2004 and adapted from previous work completed in 2000. A footnote to Table IX-1 states that "This list is current as of June 6, 2004. Subsequent updates are maintained on file at the ISOCI facility." There is no indication that ISOCI has demonstrated to DTSC that all current employees responsible for handling waste are up-to-date on required training; records showing that training was completed more than two and a half years ago are insufficient. Neither DTSC nor the public has any idea whether current employees meet the minimum requirements documented in Volume III, Section IX of the Part B application.

There is no indication that DTSC has required ISOCI to revise the WAP to reflect that waste analysis tasks always will be performed by trained personnel, or to require that ISOCI document that all personnel have received appropriate training. In addition, extensive training may not be sufficient if an employee does not have a chemistry background and the ability to understand and implement the WAP. DTSC must require ISOCI to revise the WAP accordingly and ensure that relevant personnel have a chemistry background and other necessary background for the tasks they will perform at the facility. DTSC must not issue this Permit until ISOCI demonstrates that all current employees responsible for handling waste have satisfied the minimum training requirements.

In Comment 4-14, CBE noted that the WAP is unclear as to which analyses will be performed in-house by ISOCI rather than by outside laboratory services. In its Response to Comment 4-14, DTSC quotes a section of the Part B application which states that many tests and analyses will be performed off-site. This quote does not respond to the issues raised by CBE: laboratory facility, staffing, training, waste disposal, reagent usage, and safety issues cannot be properly evaluated unless it is clear which tasks will be performed in-house. If the Permit does not specify which analytical methods will be completed in-house rather than by outside laboratory services, it is unclear how ISOCI will be required to use proper facilities and equipment, provide proper

training, and maintain documentation that ensures that in-house data are accurate, precise, and representative of the waste stream. At a bare minimum, DTSC must ensure that current ISOCI employees that will be responsible for accepting, analyzing, and managing waste have current qualifications and are appropriately trained. Training and documentation that is more than two years old is not acceptable.

CBE also pointed out in Comment 4-14 that the facility's laboratory must have a forced-air safety hood if "mixing experiments" are performed in-house. DTSC attempts to avoid responsibility by stating this is a safety issue for Cal/OSHA to regulate. As the lead agency, however, DTSC must consider and evaluate all potential environmental impacts and take appropriate steps to mitigate those impacts. DTSC must require ISOCI to revise the WAP to clarify which analytical tasks will be performed in-house and require ISOCI to consult Cal/OSHA about the safety issue prior to the effective date of the Permit. In addition, DTSC must analyze the potential environmental impact related to this safety issue without regard to the regulatory agency involved.

In Comment 4-15, CBE requested that DTSC require ISOCI to clarify in the WAP the frequency and methodology of "fingerprint" testing for incoming hazardous waste streams. In its Response to Comment 4-15, DTSC states that ISOCI is required to sample each shipment of waste prior to acceptance at the facility and that for containerized waste a minimum of 10% of the total number of containers of each waste type will be sampled for fingerprint analysis. As reflected by Comment 13-8 and other comments submitted by EP Consultants on behalf of ISOCI, however, it is clear that ISOCI is either unaware of pending requirements or confused by the process. It is doubtful that the WAP will be properly implemented as written or envisioned.

In Comment 4-16, CBE requested that DTSC clarify the methods for analyzing various types of hazardous wastes, clarify whether ISOCI has determined whether adequate laboratory methodologies are available to quantify all chemicals listed on Table III and requested that DTSC clarify the method for analyzing hexavalent chromium. In its Response to Comment 4-16, DTSC recites provisions from an EPA guidance manual but does not respond to the issues raised in CBE's comment. DTSC states that Table III outlines the methodology the facility will use during pre-acceptance of waste screening and during the receiving phase of waste screening, but DTSC has not stated whether ISOCI has determined if adequate laboratory methodologies are available to quantify all the chemicals listed on Table III. Furthermore, the Permit does not require ISOCI to separately analyze hexavalent chromium even though there is a specific regulatory threshold level for this chemical set forth in 22 CCR § 66261.24. According to OEHHA, hexavalent chromium is known to cause cancer in humans when inhaled, and it is listed as a toxic air contaminant by the Air Resources Board. CBE requests that DTSC require ISOCI to analyze hexavalent chromium separately as a condition of the Permit.

In Comment 4-18, CBE requested that DTSC explain the prescribed limits on wastes that contain PCBs, identify the adequacy of the detection limits for PCBs and dioxins, and characterize the potential impacts. CBE also requested that DTSC require the facility to perform more frequent analyses of wastes containing PCBs and to use more definitive test methods. In its Response to

Comment 4-18, DTSC has not identified the adequacy of the detection limits for PCBs, which are important to assess whether wastes containing PCBs must be rejected. More importantly, it remains unclear why the facility will even be allowed to accept, manage, and blend wastes that contain PCBs with concentration up to 49 ppm. *See* Special Condition 2.r., page 51, Section V, Permit. This is especially disturbing because much of this waste will be blended as a combustible fuel, used and burned elsewhere, and thus likely will produce dangerous products of incomplete combustion like dioxins and furans. Furthermore, the analytical protocols for used oil analysis and testing frequency in the WAP should be listed separately so that it is clear how ISOCI will be complying with used oil specification requirements for PCBs, lead, arsenic, and other constituents and thresholds.

A comment submitted by EP Consultants on behalf of ISOCI indicates that ISOCI is confused by the provisions of the Permit and the WAP, and that the facility is not complying with testing requirements set forth in the Draft Permit and Permit. The "current operations" description of used oil blending and certification on page 6 of the Permit states:

> After inbound shipments of used oil are fingerprint tested to identify the contents of the shipment, they may be commingled in the designated receiving Tanks 21, 22, 23, 24, 25, 26, and 27. Subsequently, the contents of the receiving tanks are transferred to the designated storage Tanks 100, 200, 300, 400, 500, 600, 700, where they are tested to certify that the oil meets the standards for recycled oil and the contents are no longer hazardous. Chemicals may be added and the contents are heated to remove water and break emulsions in the waste oil to produce recycled oil. Materials that are not recycled are transported to an off-site permitted hazardous waste facility for further treatment or disposal.

In Comment 13-8, EP Consultants states that "the Facility conducts fingerprint testing for polychlorinated biphenyl ("PCBs") on used oil from the receiving tanks after the used oil is commingled." This is inconsistent with the description of current operations excerpted above, which requires that fingerprint testing be conducted before the used oil is commingled. This Permit language did not change from the Draft permit to the Permit. It thus appears that ISOCI is violating a requirement of the Permit by not fingerprint testing inbound shipments of PCB-impacted used oil before used oil is commingled.

It is important that fingerprint testing be completed before commingling occurs to avoid generating a larger volume of PCB-impacted oil or diluting the PCB concentration to below allowable acceptance concentrations. If PCB concentrations are diluted through commingling at the ISOCI facility, delivery of PCB-tainted recycled motor oil back into the market could result in human exposure to unsuspecting consumers. In addition, PCBs in tainted recycled motor oil could impact the environment elsewhere.

DTSC states in its Response to Comment 13-8 that ISOCI "must submit a permit modification request after the effective date of the final permit" to modify the WAP, and that the modification request must provide the procedures for PCB analyses. DTSC's response does not make clear that any modification to the WAP also must include procedures for handling each inbound

shipment to ensure that PCB-impacted oil, if present, is not diluted before the oil is commingled with larger oil quantities. CBE requests that if ISOCI submits a permit modification request concerning the WAP, DTSC impose conditions to ensure that dilution does not occur.

In its Response to Comment 4-18, DTSC states that the facility is not authorized to accept dioxin-containing wastes. However, DTSC is not requiring the facility to test for dioxin. This is unacceptable because the facility will not be able to confirm that a waste does not contain dioxin unless it is able to test for the presence of dioxin, and dioxin could be accidentally accepted or generated at the facility during an accident. Moreover, the health risk assessment does not adequately evaluate the risks associated with accepting dioxins and furans or producing them as a result of incomplete combustion at facilities that use fuel blended at the ISOCI facility. DTSC must amend the Permit to require ISOCI to test for dioxin.

DTSC's Response to Comment 4-19 indicates that ISOCI will be allowed to treat "oil-containing liquid waste" in the wastewater treatment unit. Based on DTSC's Response to Comment 4-18, that oil could contain PCBs. Therefore, PCBs could be introduced to, and pass through the wastewater treatment unit and be discharged into the environment. DTSC must amend the Permit to ensure that PCBs are not introduced to or discharged from the facility's wastewater treatment unit.

In Comment 4-20, CBE requested that DTSC arrange for its Statewide Compliance Division to review the WAP because DTSC has been unable to assure the public that ISOCI is capable, willing, or has the resources to properly implement the provisions of the WAP. DTSC has ignored this request. *See* Response to Comment 4-20. Review by the Statewide Compliance Division would ensure that the Permit documents are enforceable. This is especially important given ISOCI's long history of non-compliance with environmental requirements, which indicates a high likelihood that DTSC will need to bring enforcement actions against ISOCI in the future. CBE respectfully requests that this Permit not be issued unless and until there is review and concurrence by the Statewide Compliance Division.

D. Acceptance of Reactive Hazardous Wastes

Hazardous wastes that exhibit the characteristic of reactivity in 22 CCR § 66261.23 have the potential to cause explosions and violent reactions, as well as generation of toxic gases and vapors in significant quantities. DTSC's Response to Comment 4-17 states that a special condition has been placed in the Permit which prohibits the facility from accepting hazardous wastes that exhibit the characteristic of reactivity. However, CBE remains concerned that ISOCI will not implement adequate procedures to ensure compliance with this special condition. According to the Part B application, the wastes that ISOCI can accept which may be reactive also contain cyanides (RCRA listed waste codes F007, F008, F009, F010, F011). These wastes were listed due to the fact they exhibit the characteristics of both toxicity and reactivity.

ISOCI's WAP states that the facility will obtain one fingerprint sample from each bulk load of waste, and for containerized waste the facility will sample 10% of the total number of containers in each shipment. The WAP states that information concerning the possible reactivity of an

incoming waste will only be noted on the incoming waste profile, which will not be verified by a fingerprint test upon arrival at the facility. Generators may mischaracterize their hazardous waste, so relying only on the generator to determine if its waste is reactive will not suffice. For any shipments of bulk waste for RCRA waste codes F007 – F011, DTSC must ensure that ISOCI analyzes each sample for the characteristic of reactivity. Language to this effect must be added to both the WAP and Permit special condition 2.q.

For containerized waste, the 10% sampling frequency is insufficient to ensure that ISOCI will not be accepting reactive wastes. For shipments of F007-F011 arriving at the facility, DTSC must require that *all* containers be sampled and analyzed to ensure that none of them exhibits the characteristic of reactivity. Finally, Table III-1 of the WAP ("Characteristics of Accepted Wastes") lists waste codes F007-F011 as being both toxic and reactive. Since ISOCI may not accept reactive wastes, this table must be revised to remove any reference to reactivity being allowed for these waste codes. Without this clarification, both the public and DTSC inspectors may be misled into believing that ISOCI may accept reactive hazardous wastes. CBE requests that DTSC not issue this Permit until ISOCI has been expressly prohibited from accepting all waste codes in which reactives may be present.

E. Storage of Cyanide-Containing Hazardous Wastes

CBE remains extremely concerned that the Permit allows ISOCI to accept cyanide-containing hazardous wastes and that such wastes could be stored in unsafe railcars on the rail spur for up to one year. *See* Comment 4-20. In our February 2006 letter, CBE noted that the consequences for the surrounding community could be devastating if a rail car full of cyanide-containing waste ruptured.[4]

DTSC's response only addresses the issue of reactive cyanide-containing waste, not the issue of storing cyanide-containing hazardous wastes on a rail spur. Moreover, DTSC states in its Response to Comment 4-21 that ISOCI must be in compliance with 22 CCR § 66264.14 at all times to ensure safety at the facility. DTSC cannot seriously rely on basic security procedures, such as fencing, security cameras and signs, to protect the public from risks posed by dangerous cyanide-containing hazardous wastes. ISOCI is not a secure installation and anyone with intent to cause harm could easily gain access to the facility. DTSC must require tougher security measures prior to issuing this Permit if ISOCI will be allowed to accept cyanide-containing hazardous wastes.

F. Truck Loading and Unloading Containment

In Comment 4-12, CBE stated that the containment capacities of the truck loading/unloading areas are insufficient. The truck loading/unloading areas are designed to hold less than 2,500 gallons, and the truck loading containment system relies on pumps and controls similar to the

[4] CBE explains later in this Petition how DTSC has failed to adequately assess the serious risks posed by storing so many dangerous hazardous wastes (including cyanide-containing wastes) on the rail spur.

inadequate secondary containment system for the rail spur. Typical truck capacity is 5,000 to 10,000 gallons. In its Response to Comment 4-12, DTSC contends that Health & Safety Code § 25200.19 does not require the truck loading/unloading areas to contain the capacity of a fully-loaded truck engaged in loading or unloading activities. CBE disagrees.

Section 25200.19 provides that loading/unloading must be conducted within containment that is "capable of collecting leaks and spills that may reasonably be anticipated to occur during loading and unloading operations." Due to the facility's proximity to known earthquake faults, it is reasonable to anticipate that a large earthquake near the facility would cause a truck engaged in loading or unloading activities to tip over or otherwise release its contents. Under the statute, then, ISOCI must be required to construct containment for the five truck loading/unloading areas that can contain the entire contents of any truck that will be loading or unloading within them. Even if DTSC disagrees that the statute requires this containment, sound policy requires DTSC to require full containment to protect the health and safety of the surrounding community.

Furthermore, staging of trucks awaiting unloading is anticipated to take up to 24 hours, and it is unclear from the Part B application if trucks arriving just before weekends or holidays would be staged for longer periods. As such, the environmental impact from the spill of a fully loaded truck that goes unnoticed (due to accident, vandalism or carelessness) could be severe. To rely solely on fully functioning pumps and operating procedures to contain this type of release is unrealistic. The Permit must be amended to require higher containment walls (suitably sloped to allow truck ingress and egress) and larger containment footprints for the truck loading/ unloading areas based on the significant impact from a potential release.

Figure II-4 in the Part B application describes the truck loading/unloading areas as "Truck Loading/Unloading and Storage Areas." This description, and the anticipated staging of trucks which may occur, implies that trucks containing hazardous waste may be stored in one or more of these areas for significant periods of time. "Storage" is defined in 22 CCR § 66260.10 as ". . . the holding of waste for a temporary period . . ." Storage of trucks containing hazardous waste in one or more of these areas is yet another reason why secondary containment that meets the regulatory requirements for hazardous waste container storage set forth in 22 CCR § 66264.175 should be constructed for the truck loading/unloading areas. DTSC must clarify exactly which hazardous waste management activities will be taking place in these areas.

Finally, none of the five truck loading/unloading areas, or the unloading operations themselves, is listed or described in the Permit. CBE is aware that permits for other hazardous waste facilities include a description of the truck loading/unloading areas and a narrative for loading/ unloading practices, even if the areas are not used for storage of hazardous waste. DTSC must add a narrative to the Permit that describes both the truck loading/unloading activities and the loading/unloading areas.

G. Segregation of Incompatible Wastes

The Part B application, Section VIII does not provide an adequate description of how incompatible hazardous wastes will be segregated to comply with 22 CCR § 66264.177. This

regulation requires hazardous waste that is incompatible with other hazardous waste to be transferred or stored to be "separated from the other materials or protected from them by means of a dike, berm, wall, or other device." Section VIII.F.2. of the Part B application states, "Incompatible RCRA based materials are only accepted in closed or covered containers for the purposes of storage and transfer. Containers are stored in either the container storage areas or are located on truck or rail vehicles for transport and disposal off-site." But Section VIII makes no mention of how incompatible wastes will be kept separate inside the container storage areas by means of a dike, berm, wall or other device to prevent mixing of incompatible wastes should one or more of the storage containers rupture. The Permit indicates that the majority of hazardous waste codes may be stored in Container Management Area No. 7. The Part B application states that this container storage area is divided into separate areas, but the Permit does not require ISOCI to segregate incompatible wastes. The Permit must be amended to include a condition specifying how ISOCI will comply with the requirements of 22 CCR § 66264.177.

Section IV.A.4.a of the Part B application states that containers will be screened to determine compatibility, but it does not describe how the facility will evaluate incoming waste shipments to determine whether they contain wastes that are incompatible with other wastes being stored at the facility. CBE notes that the ability to screen wastes properly to determine which wastes need to be physically segregated from each other is an important reason for having a properly working Operating Record system. The importance of proper incompatibility screening is underscored by the fact that incompatible wastes could be placed in the same subdivision of Container Management Area No. 7. Prior to issuing this Permit, DTSC must require ISOCI to demonstrate how the facility will evaluate whether an incoming waste is incompatible with other wastes that are being stored at the facility, and include appropriate conditions in the Permit to ensure that this evaluation occurs.

H. Operating Record

As noted in Comment 4-28, ISOCI's Operating Record description in the Part B application merely recites the regulatory requirements, and does not contain any information that explains how the Operating Record will be implemented or maintained. In its Response to Comment 4-28, DTSC states in a conclusory manner that the Operating Record meets the regulatory requirements and that the Operating Record will be evaluated during inspections. DTSC's response is inadequate for several reasons.

First, DTSC cannot determine whether ISOCI's Operating Record is in compliance with the regulatory requirements without understanding how it will be implemented and used. A properly functioning Operating Record enables facility personnel to locate a specific shipment of hazardous waste at the facility as soon as that information is needed. ISOCI has not explained how this will be done. Second, DTSC must not wait for inspectors to determine whether the Operating Record complies with regulatory requirements. A significant amount of time may transpire between the time ISOCI is granted its Permit and the time the facility is first inspected by DTSC. The facility should not be granted the Permit until DTSC is absolutely certain that all

regulations and procedures, including Operating Record implementation, will be properly followed. This is especially important given that ISOCI could accept any of hundreds of RCRA hazardous waste codes in the future, including cyanides and acids that can mix to form deadly hydrogen cyanide.

DTSC and members of the public must be able to understand how the large number of waste codes will be tracked through the facility and how incompatible wastes will be segregated from each other to prevent accidents and releases. Without a properly functioning Operating Record system, the risk of misplacement or inadvertent commingling of incompatible wastes is greatly increased. In Comment 4-28, CBE urged DTSC to require ISOCI to use a bar code scanning system. DTSC's response is that the regulations do not specify whether the Operating Record must be maintained in paper form or electronic data. CBE is aware of the regulatory requirements; sound policy requires, however, that the facility be required to use an electronic Operating Record system. CBE demands that DTSC not issue the Permit until it is certain that all regulations and procedures, including Operating Record implementation, will be properly followed, and the Permit has been amended to require that the Operating Record be maintained in electronic form.

I. Description of Equipment Used to Handle Hazardous Waste

In Comment 4-26, CBE noted that Section VIII of the Part B application lists only bulldozers, scrapers, trucks, forklifts, pumps, ramps, and lines, and requested that all equipment used to handle hazardous waste be listed in the Part B application. In its Response to Comment 4-26, DTSC indicates that the equipment already listed in the Part B application meets the requirements of 22 CCR § 66270.14. This is incorrect. For example, drum lid openers and hoses are pieces of equipment that are used to "prevent undue exposure of personnel to hazardous waste" when transferring waste from a container at the facility" and thus should have been listed in the Part B application.

CBE understands that DTSC has required other permitted hazardous waste facilities to list in their Part B applications every piece of equipment used to handle hazardous waste. DTSC must hold ISOCI to the same standard and require the necessary level of detail for listing equipment used to handle hazardous waste. Furthermore, many pieces of equipment used to handle hazardous waste may become contaminated with hazardous waste during their useful life at the facility and will have to be decontaminated or disposed of as hazardous waste at time of facility closure. DTSC must ensure that the facility closure plan and cost estimate lists all equipment that might require decontamination, as required by 22 CCR § 66264.112(b)(4). CBE requests that DTSC require ISOCI to comply with the requirements of 22 CCR § 66270.14 and list in the Part B application every piece of equipment that will be used to handle hazardous waste.

J. Staging of Hazardous Waste Containers

In Comment 4-27, CBE requested that DTSC require the Part B application to include a discussion of likely hazardous waste container staging activities at the facility and the measures that will be taken to minimize risk to human health and the environment. In its Response to

Comment 4-27, DTSC asserts there will be no specific staging areas at the facility and that ISOCI will not place hazardous waste anywhere besides a permitted unit. DTSC bases this response only on a review of the WAP, not on any further investigation or inquiry into facility hazardous waste management practices. Although specific staging areas are not described in the Part B application, CBE understands that staging frequently occurs at permitted hazardous waste facilities, such as when waste must be offloaded from a truck before it can be placed into a permitted unit or when drums of waste to be commingled in a process must be collected in one location prior to placement in a process tank. DTSC must scrutinize ISOCI's hazardous waste container management practices in greater detail and amend the Permit to include a description of authorized staging practices for hazardous waste containers.

K. Storage Tank Assessment

In Comment 4-23, CBE requested that DTSC require ISOCI to assess and recertify its tanks every three years because of the large number of additional waste codes that will be accepted and the volume of hazardous wastes, including corrosive wastes, that will be stored in tanks at the facility. CBE is aware of other permitted hazardous waste facilities that are required to assess the condition of their hazardous waste storage tanks every three years. There is no reason why ISOCI should not be held to the same standard.

DTSC's Response to Comment 4-23 states that ISOCI provided current tank assessments and that DTSC has included a special condition in the Permit requiring tank assessment every five years. DTSC has not explained why an assessment of ISOCI's storage tanks is only required every five years as compared to three years for similar facilities. If ISOCI provided new tank assessments to DTSC since the Part B application was released for comment in December 2005, those new assessments must be made available to the public for review.

The special condition added to the Permit requires only that tanks must be assessed and inspected every five years in accordance with the API 653 standard; it does not require that inspections be certified by a professional engineer. State regulation requires that a professional, California-registered engineer assess the design of any new tank and its components. *See* 22 CCR § 66264.192(h). State regulation also requires that a facility develop a procedure to assess the condition of its tanks over their operating life. *See* 22 CCR § 66264.195(e). Although the regulation does not expressly state that subsequent assessments of tanks must be performed by a professional engineer, this follows from the fact that the initial assessment must be done by a professional engineer. Further, it is industry practice to have professional engineers perform tank assessments, and CBE understands that DTSC requires these periodic tank assessments to be performed by professional engineers and often verifies this during compliance inspections.

DTSC must amend the Permit to require ISOCI to inspect and certify its tanks every three years by a professional engineer. At a minimum, the special condition must be revised to require certification by a California-registered professional engineer with a confined space certification. CBE also requests that any unreleased tank assessments be made available to the public promptly.

L. Closure Cost Estimates

The closure cost estimates approved by DTSC for both existing and proposed operations are insufficient for proper closure of the ISOCI facility. Those estimates, which are stated in special condition 1 of the Permit, are $1,583,391 for existing operations and $1,595,272 for proposed operations. Under 22 CCR § 66264.142, the closure cost estimates must equal the cost of final closure at the point in the facility's life when closure would be most expensive. In Comment 4-37, CBE explained that the Part B application confusingly includes two closure cost estimates, the larger of which ($1,748,240) appeared to be insufficient to cover potential closure costs if the facility expands to accept hundreds of additional waste codes.

In its Response to Comment 4-37, DTSC states that the $1,748,240 amount in the Part B application represented the closure cost estimate for only the existing units in place at the time of the Permit approval, and that the amount subsequently has been reduced to $1,583,391. This lower amount includes only $1,458,991 for the existing units and $124,400 for the site investigation of the former locations of the oil storage tanks at the facility. DTSC has not explained how the amount necessary for proper closure of the existing units could have dropped more than 16% within one year. DTSC must show how it determined that the level of effort (hours, subcontractor costs, etc.) represented by the lower amount is sufficient to decontaminate the site and cover necessary cost closure required by the regulation. With respect to proposed units, the cost closure estimate is only $1,595,272. This amount will be insufficient for closure of the facility if it accepts hundreds of additional waste codes.

In Comment 4-38, CBE stated that certain closure costs provided by ISOCI are unrealistically low, including unit prices for professional labor and off-site disposal of untreated hazardous wastes. CBE requested that DTSC require ISOCI to support its unit cost valuations with cost estimates from third parties. In its Response to Comment 4-38, DTSC concurs with the closure costs provided by ISOCI, explaining that it used CostPro 5.0 software to calculate the closure cost estimates and that the regulations do not require allocation of costs for addressing subsurface soil contamination that may occur in the future. However, the software referenced by DTSC is not an industry standard (such as Means Environmental Cost Guide) and neither DTSC nor ISOCI has substantiated the low closure costs.

A review of the CostPro 5.0 software used by DTSC shows that the most recent information is dated 1995. DTSC cannot rely on outdated software to approve inadequate cost closure estimates when there is no explanation of how the software determines unit costs and no indication that the software updates such costs over time or reflects higher geographic-specific costs. Moreover, the spreadsheet provided as backup for DTSC's concurrence is simplistic and appears to be based solely on the volume of the tank being decommissioned without any allowance for confined space entry and without a basis for the time estimates provided. In addition, no costs have been included to address the significant amount of historical contamination and environmental impact that are reasonably expected based on the facility's lengthy operating history and very limited environmental data.

The cost closure estimates approved by DTSC for both existing and proposed units are inconsistent with the confusing information in the Part B application and far below the amounts necessary for proper closure of the ISOCI facility. DTSC's failure to require adequate cost closure estimates creates the potential for unfunded cleanup that will require the public to bear dismantling and closure costs should the facility become insolvent. Special condition 1 of the Permit must be amended to change the cost closure estimates for existing operations and both cost closure estimates must be increased to levels sufficient to fund proper closure of the facility. CBE also requests that these estimates be supported by actual cost information from other closed RCRA facilities. If the state of California is going to grant a permit to ISOCI to accept, store, blend, and treat hazardous waste, the residents of California should not bear the burden of clean up costs or the burden of hosting another contaminated site. Adequate funds for real closure and cleanup costs based on real RCRA experience needs to be required by the state.

CBE noted in Comment 4-42 that ISOCI's closure insurance policies referenced in the Part B application were out of date. In its Response to Comment 4-42, DTSC states that ISOCI has current closure insurance and liability insurance policies. The two insurance policies, both renewed in August 2006, should have been included in the Part B application that was made available for review during the period to submit petitions for review. This highlights the incompleteness and disorganization of the Part B Permit application and the lack of public access to all documents relevant to this permit decision.

M. Closure Plan

In Comment 4-39, CBE indicated that not all of the facilities listed in ISOCI's closure plan are permitted to accept all of the hazardous wastes that may be generated during closure of the facility. ISOCI has chosen U.S. Filter (Vernon, CA) to receive all hazardous wastes other than oily water. U.S. Filter is not permitted to accept all of the other hazardous wastes which may be generated during closure, including numerous RCRA F, K, and U-listed hazardous waste codes. In its Response to Comment 4-39, DTSC states that ISOCI will transport offsite all hazardous waste to any authorized facility of its choosing and that if a facility is not permitted to accept a particular waste code, the waste may be sent to another facility that is authorized to accept such waste. DTSC's response does not address CBE's concern that all facilities permitted to handle waste generated during closure of the facility be listed in the closure plan.

A closure plan is intended to be a document that can be implemented by DTSC without further instruction in the event the facility is abandoned by its owners or operators. A closure plan also should be updated whenever listed information changes. DTSC's "Permit Writer Instructions for Closure of Treatment and Storage Facilities (Revision 1/94)" states in Section 3.5(2)(b) that an owner or operator must address in the closure plan: (1) an estimate of the distance to the final hazardous waste management facility, and (2) procedures the owner or operator will use to determine if the final hazardous waste management facility is permitted to accept the wastes generated from the closure activities.

ISOCI's closure plan should have listed a facility, or combination of facilities, that will receive the hazardous wastes generated during closure, and that are permitted to receive those wastes. Inclusion of this information in the closure plan would relieve DTSC from having to audit and select suitable facilities in the event DTSC is required to implement the closure plan. If one of the listed facilities ceases to accept certain hazardous wastes from ISOCI during the facility's operating life, then ISOCI must choose another suitable facility and modify the closure plan and closure cost estimate accordingly. Hazardous waste TSDFs do not charge the same prices for the management of hazardous waste, and these unit costs for management must be itemized in the closure cost estimate.

One example of inconsistency between the closure plan in the Part B application and DTSC's closure cost estimate is the amount of solids assumed to be remaining in tanks that must be removed at closure. In Comment 4-40, CBE commented that the closure plan assumed only 3% solids would remain in tanks, when other similar hazardous waste facilities assume 10% of solids would remain in tanks. In its Response to Comment 4-40, DTSC states that it assumed 10% of solids would remain in tanks for purposes of calculating the closure cost estimate, and that the assumptions used to prepare the closure cost estimate are not required to match the closure plan in the Part B application. CBE disagrees.

If DTSC chose to use a different assumption for the percentage of solids remaining in tanks when calculating the closure cost estimate, it should have required ISOCI to revise its closure plan to reflect this change so that the two documents are consistent and work in concert with each other. DTSC's "Permit Writer Instructions for Closure of Treatment and Storage Facilities (Revision 1/94)" explains in Section 3.5 that a closure plan must include and be based on an estimate of the maximum inventory of all hazardous wastes ever held at the facility. It specifically provides that "[t]he maximum inventory also includes the amount of hazardous waste and residues generated by sampling activities and decontamination." Therefore, the correct percentage of remaining solids in tanks which may be generated as hazardous waste during tank decontamination must be stated in the closure plan. By not requiring that the closure plan be revised so that it is consistent with the closure cost estimate, DTSC is contributing to the disorganization and inconsistency of the Part B application.

CBE requests that DTSC require ISOCI to revise the closure plan to list all facilities permitted to handle waste generated during closure of the facility. CBE also requests that the closure plan be revised so that it is consistent with the closure cost estimate.

N. Wastewater Treatment System

The HRA states that the proposed expansion of the facility would allow ISOCI to treat hazardous wastewater contaminated with oil, organic compounds, and metals in the wastewater treatment system. In its Response to Comment 4-19, DTSC states that the Permit describes wastes that will be introduced into the Wastewater Treatment Unit as wastewater "from ISOCI treatment of oil containing liquid wastes, aqueous liquids from off-site and on-site washing and rinsing activities, and inorganic off-site Waste Waters Containing less than 1% metals." This response

is inconsistent with the description in the HRA. As noted in Comment 4-19, it is unclear which of the proposed new chemicals and wastes could be introduced into the Wastewater Treatment Unit. DTSC's response only furthers the confusion.

If DTSC's description is accurate, the facility will be allowed to treat "oil containing liquid waste" in the Wastewater Treatment Unit. Based on DTSC's Response to Comment 4-18, such oil could contain PCBs. Therefore, PCBs could be introduced into and pass through the Wastewater Treatment Unit, and subsequently be discharged into the environment. The Part B application does not include historical records documenting compliance with City of Los Angeles Bureau of Sanitation effluent limits, and ISOCI has yet to receive its own discharge permit. DTSC cannot issue this Permit until it ensures that all elements are in place to protect human health and the environment, including prevention of PCBs from entering the Wastewater Treatment Unit.

In Comment 4-24, CBE noted that the Permit application states that the proposed wastewater treatment system will treat wastewaters from operations involving eleven waste codes, most of which govern used oil, oily water, and used anti-freeze that will be accepted and treated at the facility. These waste streams contain oils and organics. CBE explained that ISOCI appears to meet the definition of a centralized waste treatment facility under Clean Water Act regulations, and thus should be subject to pre-treatment standards for the oils treatment and recovery, and organics treatment and recovery subcategories established by those regulations. *See* 40 C.F.R. 437.20, *et seq.* The Permit includes no discussion or analysis concerning ISOCI's compliance with these regulatory requirements. In its Response to Comment 4-24, DTSC claims that it does not have authority to enforce Clean Water Act regulations and that the proper regulatory authority is the City of Los Angeles Bureau of Sanitation. Assuming this is correct, the Permit must be amended to specifically require ISOCI to comply with any applicable pre-treatment standards established by Clean Water Act regulations.

O. Part B Application

The Part B Permit application remains disorganized, confusing and internally inconsistent, as CBE noted in Comment 4-36. It is clear that the extended period of time it took DTSC to distribute the Part B application for public comment has resulted in an application that is a patchwork of sections written over many years by different authors. The fact that ISOCI's consultants who prepared the Part B application (EP Consultants) submitted formal comments requesting clarifications and changes to the application underscores the disorganized process of application preparation. Given that ISOCI cannot begin to implement the expanded operations described in the Part B application until it obtains a CUP from the City of Los Angeles, there is more than enough time for ISOCI to perform a comprehensive review and reorganization of the application. CBE requests that DTSC require ISOCI to reorganize the Part B application, remove extraneous portions, ensure all sections are current, and eliminate internal inconsistencies.

CBE reiterates its statement in Comment 4-43 that three Notices of Deficiency ("NODs") should have been issued for the Part B Permit application. CBE disagrees with DTSC's statement in its Response to Comment 4-43 that this issue is "beyond the scope of this permit." The fact that three NODs should have been issued relates directly to the fact that ISOCI's Part B Permit application is deficient. CBE also takes issue with DTSC's statement that the language in 22 CCR § 66271.2(e) is "merely directive and not a mandatory requirement to a public agency." CBE maintains that three NODs should have been issued, which would require DTSC to comply with the portion of the regulation that state, "[i]f an applicant does not respond to three or more notices of deficiency.... or responds with substantially incomplete or substantially unsatisfactory information on three or more occasions, the Department shall initiate proceedings to deny the permit application in accordance with the requirements of this chapter."

In its Response to Comment 4-43, DTSC states that a major reason for moving ahead with permitting of the ISOCI facility is the need for used oil recycling facilities in California. This is in direct conflict with DTSC's mission statement to "restore, protect and enhance the environment, to ensure public health, environmental quality and economic vitality, by regulating hazardous waste, conducting and overseeing cleanups, and developing and promoting pollution prevention." ISOCI already recycles used oil. The activities which ISOCI proposes to undertake, as described in the Part B application, go far beyond recycling of used oil and would allow the facility to radically expand its operations and accept hundreds of additional waste codes, including ignitable, carcinogenic, and extremely toxic wastes. The risks posed by many of the proposed operations have not been adequately evaluated, and it is clear from DTSC's own risk analyses that the project will create health risks that cannot be mitigated. We are shocked that DTSC would deviate so far from its mission statement to authorize proposed operations that will threaten public health and environmental quality.

P. Engineer Certification of Part B Application

DTSC has not addressed a serious flaw in ISOCI's Part B application, the result of which is that the public has no assurance that the additional hazardous wastes accepted at the facility will be safely and effectively treated. In Comment 4-36, CBE pointed out that it is unclear from the Part B application which engineer prepared the application, that the most recent signature by a professional engineer in the Permit application is several years old even though elements of the application were completed more recently, and that the design drawings for the treatment processes include numerous disclaimers stating that a particular drawing was prepared by others and that the engineer did not review or approve of the drawing.

In its Response to Comment 4-36, DTSC states that the most recent engineer signature in the Permit application is dated November 2003. Even if an element of the application was approved three years ago, an engineer of record cannot certify as compliant those elements of the Permit application that were designed years after his or her certification. DTSC appears to concede that it cannot be determined which engineer prepared the Part B application. Even more troubling is DTSC's failure to address the fact that design drawings for the treatment processes are stamped with disclaimers to deflect responsibility for poor future system performance from the engineer

of record. If the design engineer will not endorse these designs, the public has no assurance of safe and effective treatment of hazardous waste material at the facility.

CBE also noted that Part B applications must include a statement by an independent, qualified professional engineer attesting that the tanks and containment system at the facility are adequately designed. *See* 22 CCR § 66264.191(f). In its Response to Comment 4-36, DTSC states that only tank assessments and secondary containment need to be prepared by a certified engineer, not design drawings. DTSC misses the point that a permit application is more than a series of tank certifications and secondary containment certifications. DTSC must require that the design engineer issue a statement endorsing the design drawings for the treatment processes and certify that the processes are protective of public health and safety. If the design engineer is unwilling to make such a statement, the design drawings must be revised to his or her satisfaction.

Q. ISOCI's Compliance Record

CBE expressed concern in its comments that the DEIR omitted discussion of ISOCI's noncompliance after 1996. DTSC apologized in its Response to Comment 4-29 for the omission and stated that the final EIR has been updated to include a discussion of more recent violations. But DTSC must actually ensure that the problem is corrected. A review of the final EIR indicates that DTSC has merely included a simplified summary table of violations from DTSC inspections through 2006. Table 2-2 does not identify the specific regulatory violations at issue or the original proposed citation amounts, and the "Outcome" column of the table simply states, "All violations were corrected by the facility." This summary does not provide the public with useful information regarding ISOCI's noncompliance to date, or its efforts to return to compliance. The statement that all violations were corrected by the facility will mislead members of the public to believe that the violations were minor and easily correctable when, in fact, some violations clearly were serious. For example, violations from 2001-2003 were collectively settled for $30,000. These violations included failure to maintain containers holding hazardous waste, acceptance of unauthorized hazardous waste, and failure to record transfer and storage of hazardous waste in tanks.

The omission of recent violations from the means the public did not have the opportunity to consider it during review of the draft EIR. DTSC must re-circulate the EIR for further review and comment by the public. DTSC has also not considered the impact of ISOCI's compliance record in determining whether ISOCI's current or proposed future operations pose a risk to human health and the environment. CEQA requires DTSC to consider ISOCI's record of compliance before assuming that it will comply with hazardous waste regulations. CBE therefore believes that the EIR should anticipate and analyze future noncompliance and further evaluate the impact of releases of hazardous waste on the surrounding community from future noncompliance.

CBE specifically reviewed EPA's Enforcement and Compliance History Online (ECHO) database, which has listed ISOCI as a "high priority violator." In its Response to Comment 4-30, DTSC refers CBE to its Response to Comment 4-29, which in no way discusses DTSC's opinion

of record. If the design engineer will not endorse these designs, the public has no assurance of safe and effective treatment of hazardous waste material at the facility.

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CBE specifically reviewed EPA's Enforcement and Compliance History Online (ECHO) database, which has listed ISOCI as a "high priority violator." In its Response to Comment 4-30, DTSC refers CBE to its Response to Comment 4-29, which in no way discusses DTSC's opinion

of ISOCI's previous high priority violator designation or its impact on future compliance. In light of ISOCI's designation as a high priority violator, ISOCI should be placed into DTSC's Enhanced Surveillance Inspection category until such time that the facility is inspected and no violations are found.

III. CORRECTIVE ACTION

A. No Compliance Schedule for Corrective Action

In Comment 4-33, CBE explains that contamination exists at the facility as a result of past operations, and a 1994 RCRA Facility Assessment ("RFA") identified 58 solid waste management units ("SWMUs") and two areas of concern at the facility. The 1994 RFA concludes that SWMUs were operated without secondary containment. Although a RFI work plan was prepared by ISOCI's consultants five years ago, CBE noted in Comment 4-34 that work on the RFI has not yet begun and requested that DTSC require ISOCI to perform an RFI and fulfill its corrective action obligations. In its Response to Comment 4-34, DTSC admits that it "has previously been unable to pursue corrective action at the facility." In other words, DTSC has not required ISOCI to begin implementing the RFI work plan that was prepared in 2002. DTSC must require that ISOCI update the RFI work plan and submit an implementation schedule to clean up contamination that has been identified at the facility. ISOCI also must be required to disclose the locations of previous tanks at the facility.

The Permit requires that ISOCI conduct corrective action pursuant to the Corrective Action Consent Agreement issued on August 11, 2000. However, the Permit does not establish a date by which the RFI must be performed. DTSC's failure to include a compliance schedule for completion of the RFI and other corrective action violates federal RCRA and state law. Under both 42 U.S.C. § 6924(u) and 22 CCR § 66264.101(b), the permit for a hazardous waste facility must contain schedules of compliance for corrective action within the facility's boundary, where the corrective action cannot be completed prior to issuance of the Permit. DTSC must comply with applicable requirements by establishing schedules of compliance for corrective action at the facility and amending the Permit to include those schedules.

Under both 42 U.S.C. § 6924(v) and 22 CCR § 66264.101(c), DTSC must require that corrective action be taken beyond the facility boundary where necessary to protect human health and the environment. The Permit only requires that ISOCI conduct corrective action "at the facility," not beyond the facility boundary. The Permit must be amended to require ISOCI to conduct corrective action beyond the facility boundary, where necessary.

B. Delayed Evaluation of Groundwater Contamination and Vapor Intrusion

The Permit does not require ISOCI to address groundwater contamination issues until the RFI has been performed. (Permit, p. 63.) This is unacceptable given that the 1994 RFA concludes that future consumption of contaminated groundwater is a pathway through which human receptors could be affected. Because DTSC is not requiring ISOCI to even evaluate groundwater

contamination before issuing the Permit and has not established a date by which the RFI must be performed, DTSC has allowed and is continuing to allow groundwater contamination from the facility to continue to spread and potentially affect the surrounding community. DTSC must amend the Permit to require ISOCI to evaluate groundwater contamination within a short period of time and prior to completion of the RFI.

In Comment 4-35, CBE requested that DTSC explain whether a public drinking water well in the City of Vernon that is located one-quarter mile from the facility is an active production well and, if so, why contamination from the facility does not pose a threat to drinking water given that subsurface contamination has not been fully investigated or remediated. In its Response to Comment 4-35, DTSC states that ISOCI will be required to identify the nature and extent of groundwater contamination as part of the RFI, but DTSC ignores CBE's questions about whether the nearby public drinking water well is an active production well and whether contamination from the facility poses a threat to drinking water. DTSC must determine whether the well is an active production well and whether it is threatened by contamination from the facility, and provide this critical information to the public.

As with groundwater contamination, the Permit does not require ISOCI to address soil vapor intrusion issues until the RFI has been performed. (Permit, p. 63.) In Comment 4-25, CBE noted that the 1994 RFA identified petroleum hydrocarbons near facility buildings, as well as other volatile organic compounds around the site, that pose the potential for soil vapor intrusion. The RFI work plan is dated March 2002, well before DTSC issued its vapor intrusion guidance in December 2004 and revised the guidance in February 2005. CBE requested that DTSC require ISOCI to collect data and evaluate the vapor intrusion pathway according to current DTSC vapor intrusion guidance. The Permit does not require ISOCI to do this or even evaluate the risk unless DTSC determines there is a potential for indoor air exposure after the RFI has been performed. DTSC must amend the Permit to require ISOCI to evaluate soil vapor intrusion within a short period of time and prior to completion of the RFI.

IV. HEALTH RISK ASSESSMENT

A. Evaluation of Cancer Risk

DTSC has not corrected fundamental deficiencies in the Health Risk Assessment ("HRA"), which fails to adequately evaluate the health risk, including cancer risk, of radically expanded operations at the facility. The HRA concludes that adult residents and maximum exposed workers will be subjected to cancer risks of 1.2 per million and 5.8 per million, respectively. Not only does this exceed the standard regulatory significance threshold of one per million, as noted in Comment 14-5, but actual cancer risk from the proposed expansion and modification of the ISOCI facility's operations likely is more than 20 times greater than the cancer risk calculated in the HRA. ISOCI's proposed operations will expose the surrounding community to significantly increased cancer risks and DTSC appears not to take these risks seriously.

Incorrect Significance Threshold

The evaluation of cancer risk in the HRA is based on an inappropriate significance threshold. In its Response to Comment 14-5, DTSC states that the cancer risks from the Project do not exceed the 10 per million significance threshold established by the South Coast Air Quality Management District ("AQMD"). This value has been used by AQMD to evaluate air quality impacts associated with toxic air contaminants when other criteria may not otherwise be available to a lead agency. DTSC's use of this risk management threshold, on the other hand, is unwarranted and an alarming divergence from the customary approach of DTSC, OEHHA, and U.S. EPA to manage incremental cancer risks to, at, or below one per million, especially in residential exposure scenarios. It appears that DTSC may have arbitrarily selected a "significance criterion" for evaluating incremental cancer risk that results in inappropriate and misleading characterization of the significance of the cancer risk associated with the Project.

Even if the assumptions and calculations in the HRA are correct (which they are not), the following are the carcinogenic health risks published in the HRA and Final EIR:

- Reasonable Maximum Exposed Adult Resident: 1.16×10^{-6}
- Reasonable Maximum Exposed Worker: 5.78×10^{-6}
- Maximum Exposed Sensitive Adult Receptor: 1.04×10^{-6}
- Maximum Exposed Sensitive Child Receptor: 0.47×10^{-6}

For all but the sensitive child receptor, the carcinogenic health risks are the same as or greater than the amounts DTSC, OEHHA and U.S. EPA typically consider acceptable. Moreover, these values may understate the risk to adult workers because most of their risk is associated with inhalation, airborne impacts migrate into the surrounding neighborhoods, and the extensive worker population in the area is likely involved in heavy outdoor activity. The HRA assumes an adult inhalation rate of only 0.63 m^3/hour rather than up to 2.5 m^3/hour, which is more typical of workers involved in heavy outdoor activity. *See* Human Health Evaluation Manual, Supplemental Guidance: Standard Default Exposure Factors. Publication 9285.6-03, U.S. EPA 1991; Exposure Factors Handbook, Office of Research and Development, National Center for Environmental Assessment, EPA/600/P-95/002Fa., U.S. EPA 1997. This higher and more probable respiratory rate assumption significantly increases the real cancer risk to the adult worker population.

DTSC's divergence from the one per million standard regulatory threshold (and its own risk management philosophy) to a less protective value conflicts with the CEQA Guidelines. *See* CEQA Guidelines § 15064(b). A threshold provides a rational basis for significance determinations, which is consistent with the requirement that a lead agency's determination of significance be "based to the extent possible on scientific and factual data." *Id.* Instead of dictating a one-size-fits-all approach, CEQA authorizes public agencies to adopt by "ordinance, resolution, rule or regulation" their own "objectives, criteria, and procedures for the evaluation of projects." Public Res. Code § 21082. Ideally, a threshold of significance provides a clear differentiation of whether or not the project may result in a significant environmental effect. More practically, a threshold will assist the lead agency in making this determination. In either case, thresholds do not substitute for the lead agency's use of careful judgment in determining

significance. *See* CEQA Guidelines § 15064. DTSC has a track record of requiring and enforcing incremental cancer risks to be at or below the one per million regulatory threshold. DTSC's own practice, then, demonstrates that one per million is the appropriate threshold of significance for incremental cancer risks.

A revised HRA must be prepared that uses the standard one per million threshold to evaluate incremental cancer risks for this Project, and require appropriate mitigation measures. If the risk cannot be reduced to below the 1 per million level, the permit cannot be issued.

Inaccurate Chemical Speciation Profiles

Independent expert analysis indicates the actual facility-wide cancer risk for adult residents likely is more than 20 times higher than estimated in the HRA. *See* Exhibit D (Comments of Rob Balas, IRIS Environmental). CBE believes the HRA significantly underestimates cancer risk because the speciation profiles that are used to estimate emissions associated with the Project contain a number of incorrect assumptions about the concentration of toxic compounds that will be present in hazardous wastes that ISOCI proposes to accept. In the HRA, approximately 50% of the cancer risk generated by the facility is based on assumed speciation profiles for future waste streams in drums and fuel blending. These profiles are identified in the HRA Figures as Speciation Profile Drums and Speciation Profile #6, respectively. The HRA indicates that speciation profiles were developed from the sampling and analysis of tank headspace vapors. Speciation Profile Drums and Speciation Profile #6 apparently were not based on headspace vapor measurements, however, and the methodology used to develop these profiles is unclear. The HRA includes no explanation of how these speciation profiles were generated. *See* Final HRA Tables A-6 and A-7. These speciation profiles cannot be reproduced and appear to be non-conservative estimates of potential speciation profiles that have the effect of lowering the estimated concentration of toxic compounds. In particular, the assumed benzene content of the waste oil to be processed in the fuel blending tank is significantly lower than the typical value, and the assumed mole fractions of benzene and other relatively toxic compounds in drum headspace vapor are low compared to the assumed mole fractions in other VOC compounds. As a result, the HRA improperly underestimates potential cancer risk.

The single biggest flaw in the speciation profiles is underestimation of the concentration of benzene in incoming waste. In the 1995 Notice of Preparation, the typical fraction of benzene in waste oil for fuel blending was assumed to be 0.5% by weight. *See* Notice of Preparation, p. 8 (parameters for fuel blending unit). In the HRA, the typical fraction is assumed to be ~0.0001% for both fuel blending and drums. *See* Final HRA Tables A-6 and A-7. These percentage estimates in the HRA are far too low because they do not reflect the likely greater concentration of benzene present in fuel on the market, which will be accepted by the facility. The 1995 Notice of Preparation demonstrates that DTSC and ISOCI have already acknowledged that the concentration of benzene should be 5,000 times higher. Increasing the assumption about the concentration of benzene in incoming waste to 0.5% dramatically increases the resulting cancer risk.

Second, the two speciation profiles assume that toxic compounds are only 5% of the RCRA waste stream. This concentration estimate is flawed because ISOCI has no ability to determine the concentrations of toxic compounds in hazardous wastes that the facility has never accepted or been able to profile and analyze. The HRA must assume that the facility will be receiving an average representation of the waste streams that are currently sent to similar facilities. Using such an assumption would result in significantly higher concentrations of toxic compounds in the proposed accepted waste streams.

Third, the HRA assumes that the majority of the toxic portion of the waste stream vapor is toluene and 1,1-DCE, neither of which is a cancer causing compound. This assumption inappropriately reduces the resulting cancer risk. Fourth, three compounds listed in Section IV.D of the HRA as potentially present in drum wastes (acetaldehyde, cyclohexanone, and methanol) inexplicably are not included in the drum speciation profile. Fifth, 1,1,1-TCA and vinyl chloride are listed together in both speciation profiles. These are different compounds and should have separate listings.

Sixth, the hazard analysis in the Final EIR assumes that the chemicals of concern are present at a mole fraction of 0.3 (~30%) because of the lack of data regarding actual waste stream compositions. This is far different from the assumed concentration stated in the HRA. In other words, the hazard analysis in the Final EIR and the HRA are in direct conflict with respect to the appropriate assumption about the concentration of toxics likely to be present in future waste streams. The general approach of how to handle unknown waste streams in the risk assessment for the ISOCI facility must be consistent.

According to independent expert analysis, estimated facility-wide total cancer risk for a Reasonable Maximum Exposed Adult Resident is 2.43×10^{-5}, *approximately 21 times higher* than the cancer risk of 1.16×10^{-6} estimated in the HRA. This calculation was made with conservative revisions to the incorrect assumptions for Speciation Profile Drums and Speciation Profile #6, while maintaining the same relationship between emission rate and inhalation cancer risk that is reflected in the HRA. Given the sensitivity of the cancer risk calculations to the incorrect assumptions in the HRA, CBE requests that DTSC correct the speciation profiles discussed above. DTSC also must include in a revised risk assessment detailed appendix outlining the methods used to develop these speciation profiles. If the methods used are unsupported by measured data, the following additional items also should be included in a revised risk assessment:

- A sensitivity analysis showing the effect of raising the percentage of the toxics in the waste stream to 50%;
- A sensitivity analysis showing the effect of assuming equal liquid weight fractions for each of the toxics listed;
- A sensitivity analysis showing the effect of assuming waste fuel used in fuel blending contains 0.5% benzene;
- A sensitivity analysis showing the effect of including the additionally identified compounds, acetaldehyde, cyclohexanone, methanol, and 1,1,1-TCA.